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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,549	01/18/2002	William Ho Chang	FLEX 2401	7153

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EXAMINER
MILIA, MARK R

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/054,549	CHANG ET AL.
	Examiner	Art Unit	
	Mark R. Milia	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *18 January 2002* is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   Figures 1A, 1B, 4A, and 4B should be designated by a legend such as --Prior

Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected

drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action

to avoid abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)

because they include the following reference character(s) not mentioned in the

description: In Fig. 1A, reference character "140", Fig. 2A, reference character "202",

Fig. 2B, reference character "204", and Fig. 10, reference character "1010". Corrected

drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification

to add the reference character(s) in the description in compliance with 37 CFR 1.121(b)

are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. Each

drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Specification

3.   The disclosure is objected to because of the following informalities: On page 44,

paragraph 60, line 2, reference is made to element "720", but no reference character

"720" is found in the Figures. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 2-15, 17, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated

by U.S. Patent No. 6798530 to Buckley et al.

Regarding claim 2, Buckley discloses an output device for rendering content,

said output device including: a communication unit to receive via short range wireless

communication an intermediate output data in which includes at least part of the content

encoded in image data form with a first bit depth and a first resolution, said intermediate

output data including graphics or text elements exclusively encoded with image data

(see Figs. 1-5, column 5 lines 32-49, column 6 line 51-column 7 line 3, and column 7

lines 35-67, reference shows that data objects such as graphics, bitmaps, and text are

sent to a printer driver for subsequent conversion to print data and print control data that

will be used to render the print data, also the bit depth and resolution can be changed

as shown in figures 1 and 3-5, and therefore the data objects must have an initial bit

depth and resolution, thus the reference is analogous to the claim limitation), an

interpreter for receiving the intermediate output data and retrieving said image data from

said intermediate output data (see column 4 lines 13-18 and column 6 line 51-column 7

line 20), a processor for carrying out at least one image processing operation on the

interpreted data, said processing operation adjusting at least one of bit depth, color

space and a combination of output size and resolution of the interpreted data (see Figs.

1 and 3-5 and column 7 line 35-column 8 line 13), and an output engine for receiving

data from said processor and employing the data received from the processor to render

the content (see Fig. 2 and column 6 line 51-column 7 line 20).

Regarding claim 3, Buckley discloses the device discussed in claim 2, and further

discloses wherein the output device is a printer, the output engine is a printer engine,

and the processor is an image processor, and the second bit depth is less than the first

bit depth (see Figs. 2-4, reference shows that the bit depth can be changed and that

change can decrease the bit depth).

Regarding claim 4, Buckley discloses a method of outputting content encoded in

image data having a first bit depth and a first resolution, the content including at least

part of a text or graphics element, said method comprising: receiving an intermediate

output data that include the say image data related to content (see column 6 line 51-

column 7 line 3), interpreting the intermediate output data and retrieving said image

data from the intermediate output data (see column 7 lines 4-20), carrying out at least

one processing operation on the interpreted image data, said processing operation

adjusting at least one of bit depth, color space and a combination of output size and

resolution of the interpreted data (see Figs. 1 and 3-5 and column 7 line 35-column 8

line 13), and employing the data generated by the processing operation to render the

content (see column 6 line 63-column 7 line 3).

Regarding claim 5, Buckley discloses in a data output device for rendering

content managed with an information apparatus, the data output device including an

output engine that imparts output on a medium in accordance with output data received

at the output device, a communication unit that communicates with one or more

devices, and a memory storage that stores data for rendering; the improvement

comprising: means for providing at least an indication related to one or more data

formats acceptable to the controller in connection with rendering content at the output

device (see Figs. 1, 4, and 5, column 4 lines 13-38, and column 7 line 35-column 8 line

6, reference shows that graphic, bitmap, and text data objects can be rendered by the

system and that a user can select rendering parameters) and means for receiving an

intermediate output data related to the content managed from the information

apparatus, the intermediate output data corresponding to at least part of the content and

includes data in accordance with said one or more acceptable data formats (see Fig. 2

and column 6 line 51-column 7 line 29).

Regarding claim 6, Buckley discloses the system discussed in claim 5, and

further discloses means for establishing a wireless communication channel with an

information apparatus (see column 5 lines 32-49).

Regarding claim 7, Buckley discloses the system discussed in claim 5, and

further discloses means for converting the intermediate output data into an output data

that is acceptable for rendering with the output device (see column 7 lines 14-20).

Regarding claim 8, Buckley discloses the system discussed in claim 6, and

further discloses means for providing over the communication channel as said indication

one more of an output device identification, an intermediate output data indicator, a

quality of service indicator, a price indicator, a status indicator, an output device

attribute indicator, a rasterization parameter indicator, a format indicator, and a

language indicator (see Figs. 3-6 and column 4 lines 13-38).

Regarding claim 9, Buckley discloses the system discussed in claim 6, and

further discloses means for providing over the communication channel an output device

profile (see Figs. 1 and 3-5, column 4 lines 13-38, column 6 lines 32-50, and column 7

lines 35-67).

Regarding claim 10, Buckley discloses the system discussed in claim 5, and further discloses means for receiving intermediate output data that includes at least one output image corresponding to at least part of the content (see column 6 line 51-column 7 lines 20).

Regarding claim 11, Buckley discloses the system discussed in claim 5, and further discloses wherein the means for receiving an intermediate output data includes means for receiving the intermediate output data that includes data in accordance with MRC encoding (see column 9 lines 26-36).

Regarding claim 12, Buckley discloses the system discussed in claim 11, and further discloses means for performing at least one image processing operation on the output image; the image processing operation including one or more of a color correction operation, a color matching operation, a color space conversion, a color management operation, a scaling operation, an interpolation operation, and a halftoning operation (see Figs. 1 and 3-5, column 7 lines 35-67, and column 8 lines 61-67).

Regarding claim 13, Buckley discloses the system discussed in claim 5, and further discloses means for conforming the intermediate output data into a print data that is acceptable to a printer controller associated with a printing device (see column 7 lines 14-20).

Regarding claim 14, Buckley discloses the system discussed in claim 5, and further discloses in which the output medium is one or more of a substrate, a paper, a display screen, and a projector (see Figs 2 and 3, column 7 lines 39-46, and column 8 lines 61-65).

Regarding claim 15, Buckley discloses the system discussed in claim 5, and further discloses in which the output device further comprises means for storing one or more output device profiles with one or more attributes corresponding to the output devices (see column 6 lines 48-50).

Regarding claim 17, Buckley discloses the system discussed in claim 5, and further discloses in which the output device includes a printer (see Fig. 2).

Regarding claim 21, Buckley discloses the system discussed in claim 5, and further discloses in which the output device further includes means for converting the output data content into a form compatible with the output engine (see column 7 lines 14-20).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley in view of U.S. Patent No. 6020973 to Levine et al.

Buckley discloses a method of operating a printing device that includes a printer engine for rendering data encoded in a raster form, said method comprising: receiving by short range wireless communication an intermediate data which includes image data

corresponding to at least part of the content (see column 5 lines 32-49), extracting the image data from said intermediate data (see column 7 lines 14-20), converting the data in the page description language to the raster form rendered by the printer engine (see column 4 lines 13-18 and column 7 lines 14-20), and supplying the data in the raster form to the printer engine (see Fig. 2 and column 6 line 63-column 7 line 3).

Buckley does not disclose expressly converting the image data to data in a page description language form.

Levine discloses converting the image data to data in a page description language form (see column 7 line 40-45).

Buckley & Levine are combinable because they are from the same field of endeavor, output of print data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the converting of image data into page description language as described Levine, and which is well known and used in the art, with the system of Buckley.

The suggestion/motivation for doing so would have been to provide image data in a form that contains information about printing parameters to be utilized during rendering.

Therefore, it would have been obvious to combine Levine with Buckley to obtain the invention as specified in claim 1.

8.   Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley

as applied to claim 5 above, and further in view of Levine.

Buckley discloses an output device providing at least part of the output device

profile to an information apparatus (see Figs. 1 and 3-5, column 4 lines 13-38, and

column 7 line 35-column 8 line 13).

Buckley does not disclose expressly plural information apparatuses.

Levine discloses plural information apparatuses utilizing an output device (see

Fig. 5 and column 5 lines 15-40).

Buckley & Levine are combinable because they are from the same field of

endeavor, output of print data.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the plurality of information apparatuses as described by

Levine, and which is well known and used in the art, with the system of Buckley.

The suggestion/motivation for doing so would have been to provide multiple

users access to the output devices to increase efficiency and productivity.

Therefore, it would have been obvious to combine Levine with Buckley to obtain

the invention as specified in claim 16.

9.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley

as applied to claim 5 above, and further in view of U.S. Patent No. 6434535 to Kupka et

al.

Buckley does not disclose expressly the output device further includes means for

implementing payment processing as compensation for rendering of the output content

on the output device.

Kupka discloses the output device further includes means for implementing

payment processing as compensation for rendering of the output content on the output

device (see Fig. 1, column 3 line 53-column 4 line 5, column 7 line 48-column 8 line 7,

and column 14 lines 3-16).

Buckley & Kupka are combinable because they are from the same problem

solving area, distribution of electronic data.

At the time of the invention, it would have been obvious to a person of ordinary

skill in the art to combine the payment processing method, which is well known and

used in the art, as described by Kupka with the system of Buckley.

The suggestion/motivation for doing so would have been to accurately calculate

and collect payment for services rendered (data rendered).

Therefore, it would have been obvious to combine Kupka with Buckley to obtain

the invention as specified in claim 18.

10.   Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley

as applied to claim 5 above, and further in view of U.S. Patent No. 6600569 to Osada et

al.

Buckley does not disclose expressly means for implementing job management

functionalities with one or more of data output job queuing and spooling.

Osada discloses means for implementing job management functionalities with one or more of data output job queuing and spooling (see Figs. 4 and 20, column 4 lines 12-65, and column 17 lines 52-59).

Buckley & Osada are combinable because they are from the same field of endeavor, output of print data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the job queue as described by Osada, and which is well known and used in the art, with the system of Buckley.

The suggestion/motivation for doing so would have been to allow a user to select a plurality of print jobs to be rendered without the need to wait for the print job to actually be executed, by sequentially storing the data for subsequent output, and when a printer becomes available to execute the job.

Therefore, it would have been obvious to combine Osada with Buckley to obtain the invention as specified in claim 19.

11.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buckley as applied to claim 5 above, and further in view of U.S. Patent No. 6421748 to Lin et al.

Buckley does not disclose expressly means for implementing a security procedure that limits access to the rendering provided by the selected output device.

Lin discloses means for implementing a security procedure that limits access to the rendering provided by the selected output device (see Fig. 2 and column 4 lines 26-35).

Buckley & Lin are combinable because they are from the same field of endeavor, output of print data.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the security procedure as described by Lin, and which is well known and used in the art, with the system of Buckley.

The suggestion/motivation for doing so would have been allow only certain users or workstations access to particular output devices.

Therefore, it would have been obvious to combine Lin with Buckley to obtain the invention as specified in claim 20.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art refer to the attached Notice Of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (571) 272-7402. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia
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